


PRELIMINARY AMENDMENT  
U.S. Appln. No. 09/942,992

**REMARKS**

Support for the above amendments to correct inadvertent errors is provided by, for example, page 21, lines 1-6, where the tear strength is described. With regard to page 20, line 7, Applicants are correcting an inadvertent error. Entry and consideration of this Amendment is respectfully requested.

Respectfully submitted,

  
John T. Callahan  
Registration No. 32,607

SUGHRUE MION, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, D.C. 20037-3213  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

Date: December 14, 2001

**APPENDIX**  
**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE SPECIFICATION:**

**The specification is changed as follows:**

**Page 2, last paragraph bridging page 3, delete and insert the following:**

**SUMMARY OF THE INVENTION**

The present invention has an object of providing a rubber composition which exhibits improved abrasion resistance, [heat] tear resistance and low heat generating property and is advantageously used for tread rubber of heavy duty pneumatic tires, and it is another object to provide a heavy duty pneumatic tire using the rubber composition for tread rubber.

**Page 20, first full paragraph, delete and insert the following:**

One hundred parts by weight of rubber components having the Compositions shown in Table 1, 2-hydroxy-N'-(1,3-dimethylbutylidene)-3-naphthoic acid hydrazide (BMH) in amounts shown in Table 1, 50 parts by weight of carbon black of the SAF grade, 1.0 part by weight of ["WMO2"] microcrystalline wax (manufactured by SEIKO KAGAKU Co., Ltd.) 2.0 parts by weight of stearic acid, 1.3 parts by weight of an antioxidant 6C (N-phenyl-N'-(1-3-dimethylbutyl)-p-phenylenediamine), 3.5 parts by weight of zinc oxide, 1.0 part by weight of a vulcanization accelerator CZ(N-cyclohexyl-2-benzothiazyl sulfeneamide) and 1.2 parts by weight of sulfur were compounded and rubber compositions were [prepared.] prepared and vulcanized at 145°C for 30 minutes. The prepared rubber compositions were used for tread rubbers and tires having sized (11R22.5) were prepared.

**Page 20, last paragraph, bridging page 21, delete and insert the following:**

(2) [Heat] Tear resistance

From a tread of a tire after the abrasion test, a block of 10 X 10 X 200 mm was obtained as a sample. A cut of 30 mm was formed in the sample at the center in the direction of the thickness. Portions of the sample at both sides of the formed cut were pulled apart and the tear strength was measured. The result is expressed as an index based on the result of Comparative Example 1 which is set at 100. The greater the value, the better the [heat generating property] tear resistance.

**Page 21, last paragraph, delete and insert the following:**

The reverse of the amount of abrasion was used as the abrasion resistance. The result is expressed as an index based on the result of Comparative Example 1 which is set at 100. The greater the value, the better the [heat generating property] abrasion resistance.

**Page 22, Table 1 - 1, delete and insert the following new table:**

Table 1 - 1

	Example 1	Example 2	Example 3	Comparative Example 1
Rubber component (part by weight)				
natural rubber	80	60	50	100
E-SBR <sup>1)</sup>	-	-	-	-
S-SBR <sup>2)</sup>	20	40	20	-
BR <sup>3)</sup>	-	-	30	-
BMH <sup>4)</sup> (part by weight)	1.0	1.0	1.0	-
Low heat generating Property (index)	112	125	126	100
[Heat] <u>Tear</u> Resistance (index)	122	117	115	100
Abrasion resistance (index)	114	116	125	100

**Page 23, Table 1 - 2, delete and insert the following new Table.**

Table 1 - 2

	Comparative Example 2	Comparative Example 3	Comparative Example 4	Comparative Example 5
Rubber component (part by weight)				
natural rubber	80	80	60	60
E-SBR <sup>1)</sup>	20	-	40	-
S-SBR <sup>2)</sup>	-	20	-	40
BR <sup>3)</sup>	-	-	-	-
BMH <sup>4)</sup> (part by weight)	-	-	-	-
Low heat generating Property (index)	94	100	87	110
[Heat] <u>Tear</u> Resistance (index)	105	106	112	101
Abrasion resistance (index)	107	107	110	110

**Page 24, first paragraph, delete and insert the following:**

As shown in Table 1, the rubber compositions of the present invention comprising the styrene-butadiene rubber obtained by a solution polymerization having a Sn atom in its molecule, and a hydrazide compound exhibit an excellent balance between physical properties of the low heat generating property, [heat] tear resistance and abrasion resistance.

**IN THE ABSTRACT:**

**Page 27, Abstract of the Disclosure, delete second paragraph and insert as follows:**

PRELIMINARY AMENDMENT  
U.S. Appln. No. 09/942,992

The rubber composition exhibits improved abrasion resistance, [heat] tear resistance and low heat generating property and is advantageously used for tread rubber of heavy duty pneumatic tires.